MOOG

Installation and Operation Instructions

Before attempting to connect or operate this product, please read these instructions completely.

PolEvator™

Camera Lowering Device

PV16N.....16 Foot Lowering Pole includes flexible shaft

PV18N.....18 Foot Lowering Pole includes 16 foot aluminum pole with 2 foot transformer base, nema box, transformer and flexible shaft

2 foot
transformer base

Moog Inc.
Sensor and Surveillance Systems
3650 Woodhead Drive Northbrook, IL. USA 60062
+1.847.498.0700 Fax: +1.847.498.1258 www.moogS3.com

© 2013, Moog Inc. All Rights Reserved

81-IN5230 111813

IMPORTANT SAFEGUARDS

1 Read these instructions.

2 Keep these instructions.

3 Heed all warnings

4 Follow all instructions.

5 Do not use this apparatus near water.

6 Clean only with damp cloth.

7 Do not block any of the ventilation openings. Install in accordance with the manufacturers instructions.

8 Cable Runs- All cable runs must be within permissible distance.

9 Mounting - This unit must be properly and securely mounted to a supporting structure capable of sustaining the weight of the unit.

Accordingly:

a. This installation should be made by a qualified service person and should conform to all local codes.

b. Care should be exercised to select suitable hardware to install the unit, taking into account both the composition of the mounting surface and the weight of the unit.

10 Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.

11 Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. When the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.

12 Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.

13 Only use attachment/ accessories specified by the manufacturer.

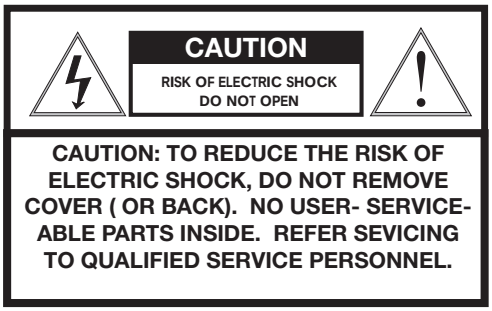
14 Use only with a cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/ apparatus combination to avoid injury from tip-over.

15 Unplug this apparatus during lighting storms or when unused for long periods of time.

16 Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled of objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.

Be sure to periodically examine the unit and the supporting structure to make sure that the integrity of the installation is intact. Failure to comply with the foregoing could result in the unit separating from the support structure and falling, with resultant damages or injury to anyone or anything struck by the falling unit.

SAFETY PRECAUTIONS


CAUTION
RISK OF ELECTRIC SHOCK
DO NOT OPEN
CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). NO USER- SERVICE-ABLE PARTS INSIDE. REFER SEVICING TO QUALIFIED SERVICE PERSONNEL.

The lightning flash with an arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of non-insulated “dangerous voltage” within the product’s enclosure that may be of sufficient magnitude to constitute a risk to persons.

Este símbolo se piensa para alertar al usuario a la presencia del “voltaje peligroso no-aislado” dentro del recinto de los productos que puede ser un riesgo de choque eléctrico.

Ce symbole est prévu pour alerter l’utilisateur à la presence “de la tension dangereuse” non-isolée dans la clôture de produits qui peut être un risque de choc électrique.

Dieses Symbol soll den Benutzer zum Vorhandensein der nicht-Isolier “Gefährdungsspannung” innerhalb der Produkteinschließung alarmieren die eine Gefahr des elektrischen Schlages sein kann.

Este símbolo é pretendido alertar o usuário à presença “di tensão perigosa non-isolada” dentro do cerco dos produtos que pode ser um risco de choque elétrico.

Questo simbolo è inteso per avvertire l’utente alla presenza “di tensione pericolosa” non-isolata all’interno della recinzione dei prodotti che può essere un rischio di scossa elettrica.

The exclamation point within an equilateral triangle is intended to alert the user to presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

Este símbolo del punto del exclamation se piensa para alertar al usuario a la presencia de instrucciones importantes en la literatura que acompaña la aplicación.

Ce symbole de point d’exclamation est prévu pour alerter l’utilisateur à la presence des instructions importantes dans la littérature accompagnant l’appareil.

Dieses Ausruf Punktsymbol soll den Benutzer zum Vorhandensein de wichtigen Anweisungen in der Literatur alarmieren, die das Gerät begleitet.

Este símbolo do ponto do exclamation é pretendido alertar o usuário à presença de instruções importantes na literatura que acompanha o dispositivo.

Questo simbolo del punto del exclamaton è inteso per avvertire l’utente alla presenza delle istruzioni importanti nella letteratura che accompagna l'apparecchio.

UNPACKING

Unpack carefully. Electronic components can be damaged if improperly handled or dropped. If an item appears to have been damaged in shipment, replace it properly in its carton and notify the shipper.

Be sure to save:

1 The shipping carton and packaging material. They are the safest material in which to make future shipments of the equipment.

2 These Installation and Operating Instructions.

SERVICE

If technical support or service is needed, contact us at the following number:

TECHNICAL SUPPORT
AVAILABLE 24 HOURS
1 - 800 - 554 -1124

MADE IN USA
BUY AMERICA COMPLIANT • COUNTRY OF ORIGIN U.S.A.

Product Warranty Registration

Register Your Products Online
www.moogS3.com/technical-support/product-registration

Moog values your patronage. We are solely committed to providing you with the highest quality products and superior customer service. With 3-Year and 5-Year warranties (depending on the product purchased) we stand behind every product we sell.

See full warranty details at **www.moogS3.com/technical-support/warranty-plan/**

Register your products today to receive the following benefits:

- Simple and Trouble-Free RMA process
- Product / software updates
- Special promotions
- Eliminate the need to archive purchase documents such as receipts, purchase orders, etc.

Limited Warranty for Moog Products

Moog - Decatur Operations, subsequently referred to as “Manufacturer,” warrants these products to be free from defects in material or workmanship as follows:

PRODUCT CATEGORY	PARTS \ LABOR
All Enclosures and Electronics	Five (5) Years
Accessory Brackets	Five (5) Years
Controllers	Three (3) Years
Power Supplies / IR Illuminators	Three (3) Years
Poles / PolEvators™ / CamEvator	Three (3) Years
Warrior Series™ / Q-View™	Three (3) Years
SView Series™	Three (3) Years 6 months if used in auto scan / tour operation
DeputyDome™, NiteTrac™, Igloo Dome, PurgeDome™	Three (3) Years 6 months if used in auto scan / tour operation
EXO Series™ Dome and Fixed Camera Systems*	Three (3) Years 6 months if used in auto scan / tour operation
EXO Series™ GeminEye Visible and Thermal Camera Systems	One (1) Year

During the labor warranty period, to repair the Product, Purchaser will either return the defective product, freight prepaid, or deliver it to Manufacturer at Moog Decatur Operations, 2525 Park Central Boulevard, Decatur, Georgia, 30035. The Product to be repaired is to be returned in either its original carton or a similar package affording an equal degree of protection with a RMA # (Return Materials Authorization number) displayed on the outer box or packing slip. To obtain a RMA# you must contact our Technical Support Team at 800.554.1124, extension 101. Manufacturer will return the repaired product freight prepaid to Purchaser. Manufacturer is not obligated to provide Purchaser with a substitute unit during the warranty period or at any time. After the applicable warranty period, Purchaser must pay all labor and/or parts charges. The limited warranty stated in these product instructions is subject to all of the following terms and conditions.

TERMS AND CONDITIONS

1. NOTIFICATION OF CLAIMS: WARRANTY SERVICE: If Purchaser believes that the Product is defective in material or workmanship, then written notice with an explanation of the claim shall be given promptly by Purchaser to Manufacturer. All claims for warranty service must be made within the warranty period. If after investigation, Manufacturer determines the reported problem was not covered by the warranty, Purchaser shall pay Manufacturer for the cost of investigating the problem at its then prevailing per incident billable rate. No repair or replacement of any Product or part thereof shall extend the warranty period of the entire Product. The specific warranty on the repaired part only shall be in effect for a period of ninety (90) days following the repair or replacement of that part or the remaining period of the Product parts warranty, whichever is greater.

2. EXCLUSIVE REMEDY: ACCEPTANCE: Purchaser’s exclusive remedy and Manufacturer’s sole obligation is to supply (or pay for) all labor necessary to repair any Product found to be defective within the warranty period and to supply, at no extra charge, new or rebuilt replacements for defective parts.

3. EXCEPTIONS TO LIMITED WARRANTY: Manufacturer shall have no liability or obligation to Purchaser with respect to any Product requiring service during the warranty period which is subjected to any of the following: abuse, improper use, negligence, accident, or acts of God (i.e., hurricanes, earthquakes), modification, failure of the end-user to follow the directions outlined in the product instructions, failure of the end-user to follow the maintenance procedures recommended by the International Security Industry Organization, written in product instructions, or recommended in the service manual for the Product. Furthermore, Manufacturer shall have no liability where a schedule is specified for regular replacement or maintenance or cleaning of certain parts (based on usage) and the end-user has failed to follow such schedule; attempted repair by non-qualified personnel; operation of the Product outside of the published environmental and electrical parameters, or if such Product’s original identification (trademark, serial number) markings have been defaced, altered, or removed. Manufacturer excludes from warranty coverage Products sold AS IS and/or WITH ALL FAULTS and excludes used Products which have not been sold by Manufacturer to the Purchaser. All software and accompanying documentation furnished with, or as part of the Product is furnished “AS IS” (i.e., without any warranty of any kind), except where expressly provided otherwise in any documentation or license agreement furnished with the Product. ANY COST ASSOCIATED WITH REMOVAL OF DEFECTIVE PRODUCT AND INSTALLATION OF REPLACEMENT PRODUCT IS NOT INCLUDED IN THIS WARRANTY.

4. PROOF OF PURCHASE: The Purchaser’s dated bill of sale must be retained as evidence of the date of purchase and to establish warranty eligibility.

DISCLAIMER OF WARRANTY

EXCEPT FOR THE FOREGOING WARRANTIES, MANUFACTURER HEREBY DISCLAIMS AND EXCLUDES ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO ANY AND/OR ALL IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND/OR ANY WARRANTY WITH REGARD TO ANY CLAIM OF INFRINGEMENT THAT MAY BE PROVIDED IN SECTION 2-312(3) OF THE UNIFORM COMMERCIAL CODE AND/OR IN ANY OTHER COMPARABLE STATE STATUTE. MANUFACTURER HEREBY DISCLAIMS ANY REPRESENTATIONS OR WARRANTY THAT THE PRODUCT IS COMPATIBLE WITH ANY COMBINATION OF NON-MANUFACTURER PRODUCTS OR NON-MANUFACTURER RECOMMENDED PRODUCTS PURCHASER MAY CHOOSE TO CONNECT TO THE PRODUCT.

LIMITATION OF LIABILITY

THE LIABILITY OF Manufacturer, IF ANY, AND PURCHASER’S SOLE AND EXCLUSIVE REMEDY FOR DAMAGES FOR ANY CLAIM OF ANY KIND WHATSOEVER, REGARDLESS OF THE LEGAL THEORY AND WHETHER ARISING IN TORT OR CONTRACT, SHALL NOT BE GREATER THAN THE ACTUAL PURCHASE PRICE OF THE PRODUCT WITH RESPECT TO WHICH SUCH CLAIM IS MADE. IN NO EVENT SHALL MANUFACTURER BE LIABLE TO PURCHASER FOR ANY SPECIAL, INDIRECT, INCIDENTAL, OR CONSEQUENTIAL DAMAGES OF ANY KIND INCLUDING, BUT NOT LIMITED TO, COMPENSATION, REPLACEMENT LABOR COSTS, REIMBURSEMENT, OR DAMAGES ON ACCOUNT OF THE LOSS OF PRESENT OR PROSPECTIVE PROFITS OR FOR ANY OTHER REASON WHATSOEVER.

IMPORTANT SAFEGUARDS

Please read these instructions carefully before proceeding,and heed all cautions.

1. At 150 lbs. the **PolEvator**™ is capable of being erected by 2 adults with not lifting equipment. However, to prevent personal injury or damage to the pole, **EXTREME CAUTION** should be used when lifting the pole.
2. DO NOT erect the pole in high wind, during periods of lightning, or in icy conditions.
3. DO NOT operate the pole carriage when the pole is in a horizontal position.

Lea por favor estas instrucciones cuidadosamente antes el procedimiento, y presta atención a todas las precauciones.

1. En 150 libras. el **PolEvator**™ es capaz de la erección por 2 adultos con el equipo de elevación. Sin embargo, a prevenga los daños corporales o el daño al poste, La **PRECAUCIÓN EXTREMA** debe ser utilizada al levantar poste.
2. No erija el poste en fuerte viento, durante períodos de relámpago, o en condiciones heladas.
3. No funcione el carro del poste cuando el poste está adentro una posición horizontal.

Veuillez lire ces instructions soigneusement avant la marche à suivre, et observent toutes les attentions.

1. À 150 livres. le **PolEvator**™ est capable de l'érection par 2 adultes avec l'équipement de levage. Cependant, à empêchez le dommage corporel ou les dommages au poteau, **L'ATTENTION EXTRÊME** devrait être employée en se soulevant poteau.
2. N'érigez pas le poteau en fort vent, au cours des périodes de foudre, ou en conditions glaciales.
3. N'actionnez pas le chariot de poteau quand le poteau est dedans une position horizontale.

Lesen Sie bitte diese Anweisungen sorgfältig vorher das Verfahren und beachten alle Vorsichtsmaßnahmen.

1. Bei 150 lbs. das **PolEvator**™ ist zu aufgerichtet werden fähig durch 2 Erwachsene mit nicht Hebezeug. Jedoch zu verhindern Sie Personenschaden oder Schaden des Pfostens, **EXTREME VORSICHT** sollte beim Anheben verwendet werden Pfosten.
2. Richten Sie den Pfosten im starken Wind, NICHT während der Zeiträume von auf Blitz oder in den eisigen Bedingungen.
3. Betreiben Sie NICHT den Pfostenwagen, wenn der Pfosten innen ist eine horizontale Position.

Leia por favor estas instruções com cuidado antes prosiguer, e observa todos os cuidados.

1. Em 150 libras. o **PolEvator**™ é capaz da erecção por 2 adultos com equipamento de levantamento. Entretanto, a impeça ferimento pessoal ou dano ao pólo, **O CUIDADO EXTREMO** deve ser usado ao levantar pólo.
2. Não erija o pólo no vento forte, durante períodos de relâmpago, ou em circunstâncias geladas.
3. Não opere a carruagem do pólo quando o pólo está dentro uma posição horizontal.

Legga prego con attenzione prima queste istruzioni la continuazione e fa attenzione a tutte le avvertenze.

1. A 150 libbre. il **PolEvator**™ è capace di costruzione da 2 adulti con l'apparecchiatura di sollevamento. Tuttavia, a prevenga danni la ferita personale o to il palo, **L'ATTENZIONE ESTREMA** dovrebbe essere usata quando alza palo.
2. Non eriga il palo in vento forte, durante i periodi di lampo, o nelle circostanze ghiacciate.
3. Non faccia funzionare il carrello del palo quando il palo è dentro una posizione orizzontale.

Note: For installation of PV1 Lightning Rod see Instruction manual 81-IN5256.

Nota: Para la instalación del pararrayos PV1 vea la instrucción 81-IN5256 manual.

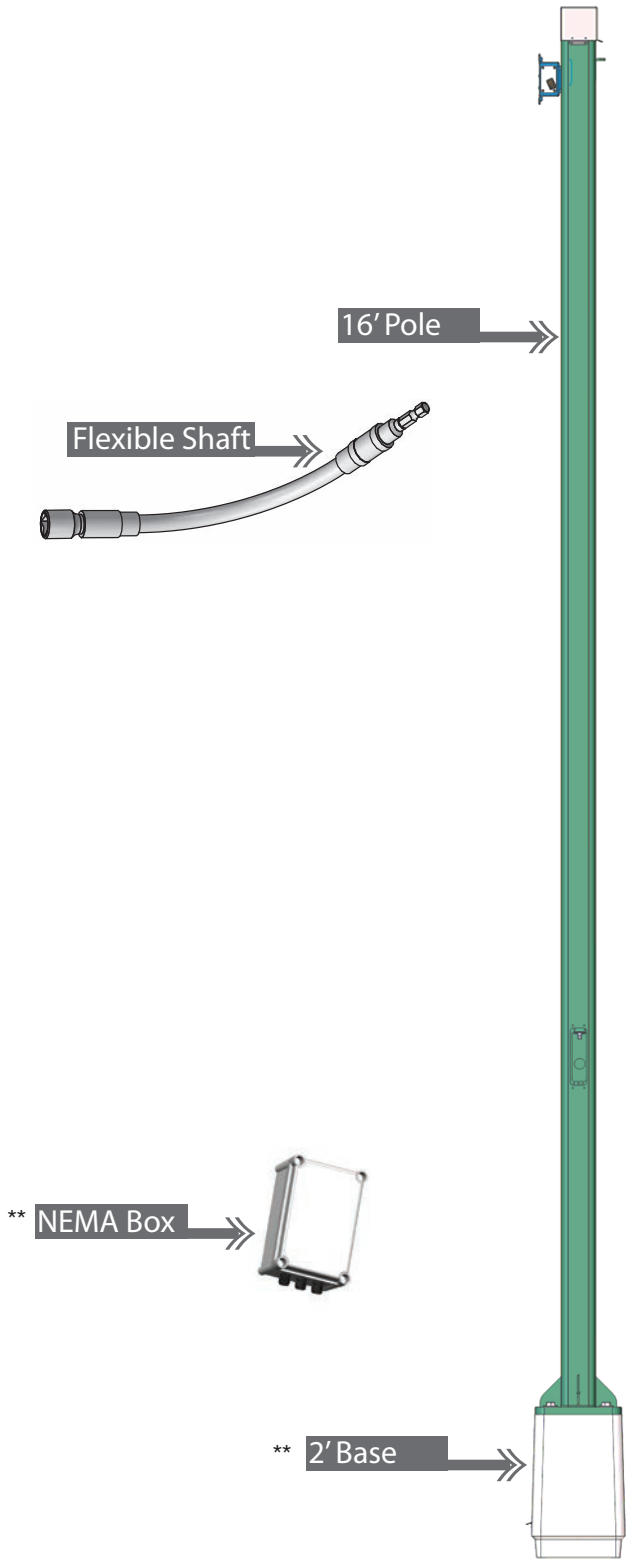
Note : Pour l'installation du paratonnerre PV1 voir l'instruction 81-IN5256 manuel.

Anmerkung: Für Installation des Blitzableiters PV1 sehen Sie Anweisung manuelles 81-IN5256.

Nota: Para a instalação PV1 do relâmpago Rod veja a instrução 81-IN5256 manual.

Nota: Per installazione del parafulmine PV1 vedi la manuale d'istruzione 81-IN5256.

Content of Box

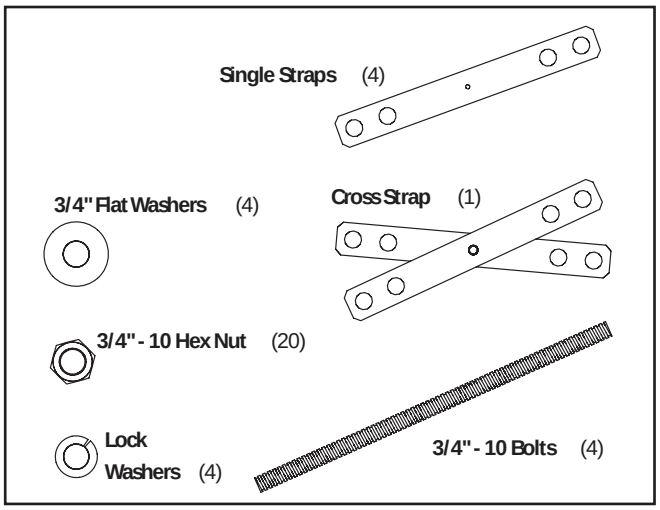


** NEMA Box and Base included with PV18N ONLY

1 Anchor Jig Assembly

Anchor Jig Kit Parts List

Sold Separately

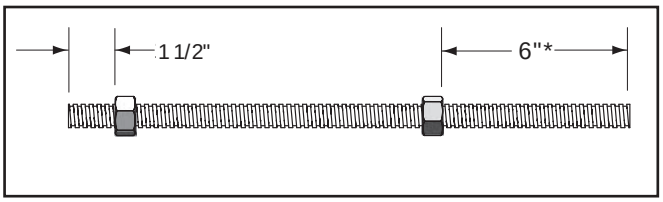


CAUTION: To prevent corrosion; never mix galvanized hardware with stainless steel hardware!

2 Anchor Jig Assembly

Figure 1

Sold Separately



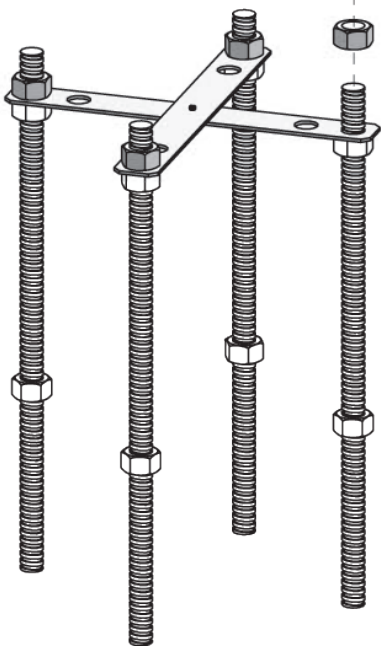
1. Thread two (2) **nuts** onto each of the (4) **bolts**(Figure 1). The end with 6" of clearance will be the top of the **Anchor Jig**, the end with 1 1/2" clearance will be the bottom.

NOTE: Because of surface conditions it may be necessary to use leveling nuts.

3 Anchor Jig Assembly

Figure 2

Sold Separately

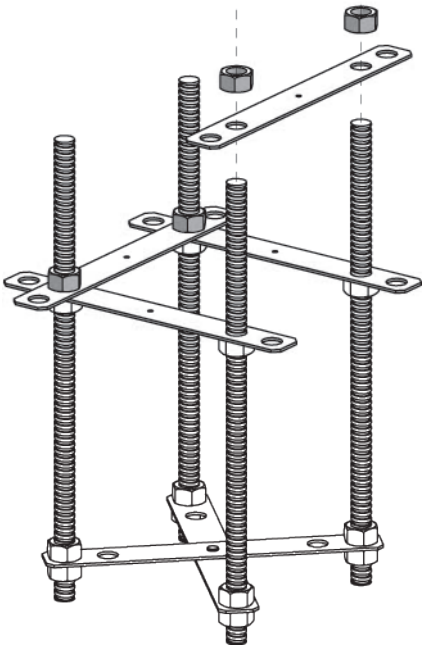


Place the short end of each **Bolt** into the outside holes of the **Cross Strap.** Place **Hex Nuts** onto each **Bolt** and finger tighten.

4 Anchor Jig Assembly

Figure 3

Sold Separately

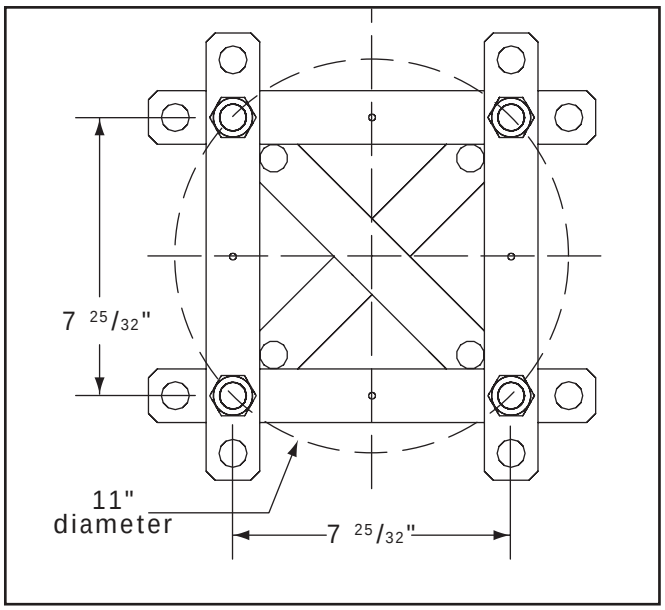


Turn the **Anchor Jig** over and place **Single Straps** over the **Bolts.** Use the inside hole of each strap. Place **Hex Nuts** onto each **Bolt** and finger tighten.

5

Anchor Jig Assembly Figure 4

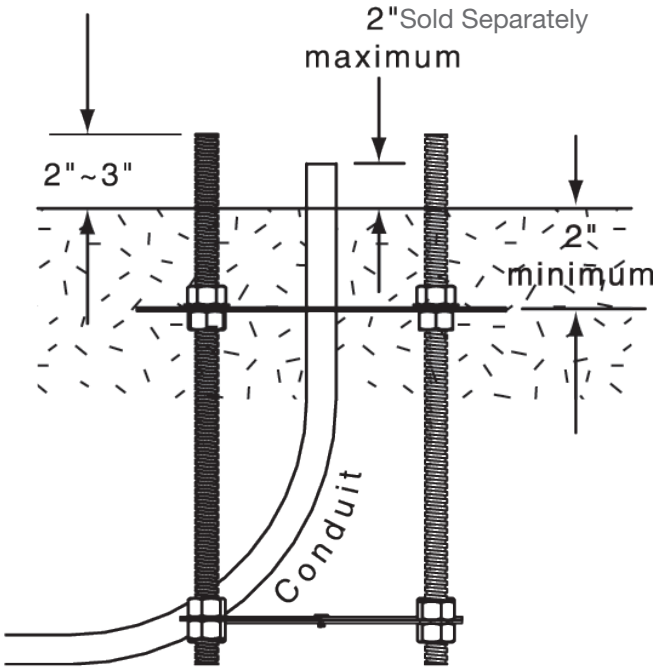
Sold Separately



Before using the **Anchor Jig** verify that the center to center dimensions between the bolts are even. If not, adjust accordingly. Firmly tighten all **Hex Nuts**.

6

Anchor Jig Assembly Figure 5



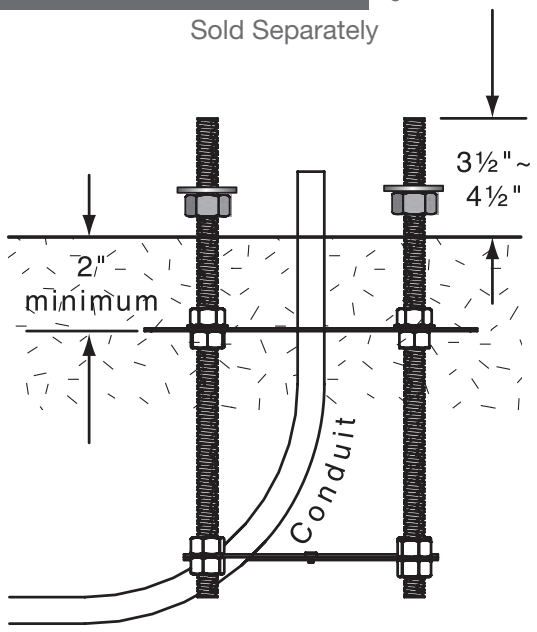
Without Leveling Nuts

Standard installation without leveling nuts.

7

Anchor Jig Assembly Figure 6

Sold Separately



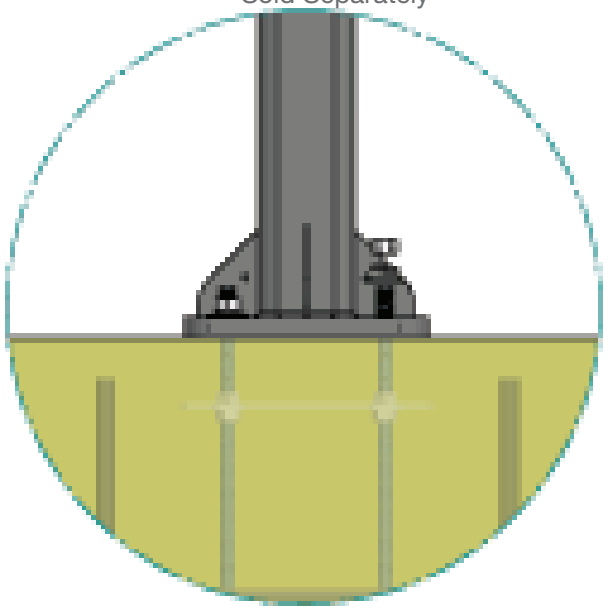
With Leveling Nuts

If, due to conditions or other requirements, leveling nuts are needed, adjustments will have to be made to the **Anchor Jig**. Leveling nuts and washers are NOT provided with the pole,

8

Anchor Jig Assembly Figure 7

Sold Separately



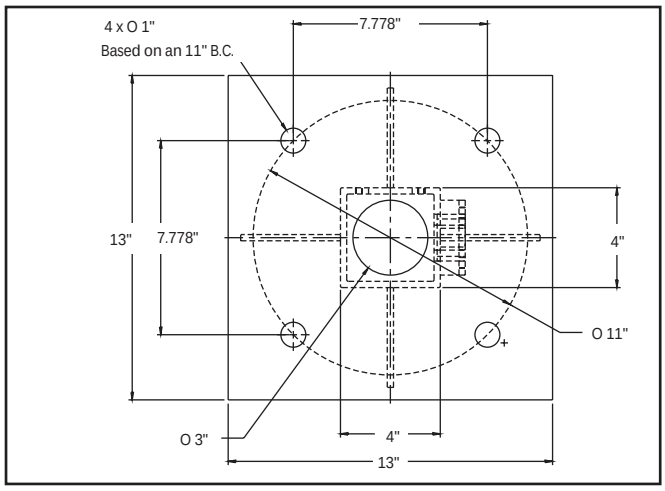
NOTE: The **Flat Washers**, **Lock Washers**, and remaining **Hex Nuts** will be used to fasten the pole to the **Anchor Jig.**

9

Part 1: Site Preparation Figure 8

FOR ANCHOR BOLT INSTALLATIONS:

Pour concrete per manufacrurer's directions. See Figure 8 for dimensions of the bolt pattern and suspend appropriate bolts in the concrete around the wiring conduit. Leave 2" to 3" of the **BOLTS** protruding above the pad. If you are using leveling nuts, leave 4" to 6" protruding.

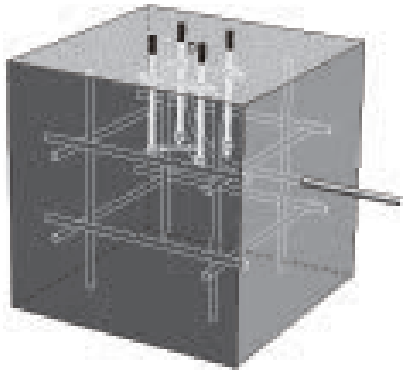


10

Part 1: Site Preparation Figure 9

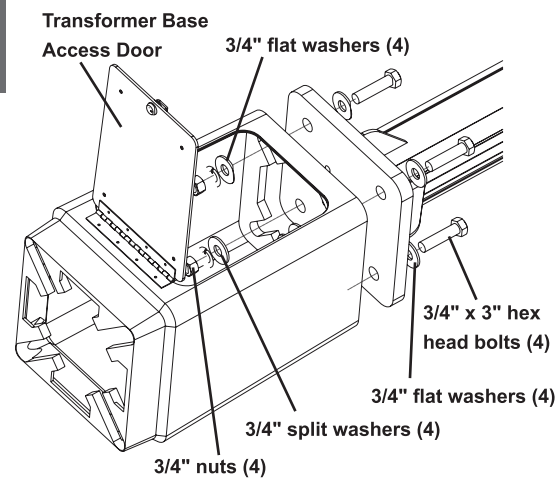
Prepare the concrete per manufacturer's directions. The concrete must have a compressive strength of 3000 psi, and must be fabricated following ACI318-89 requirements. Allow the concrete foundation to cure thoroughly before proceeding with the installation.

Schematic view of concrete foundation



PV18N ONLY

11

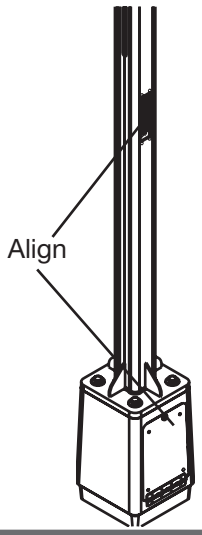


Assemble the pole and transformer base using the ¾" bolt, nuts, and washers provided.

- Monte la base del poste y del transformador usando perno, las tuercas, y las arandelas del ¾" proporcionadas.
- Assemblez la base de poteau et de transformateur boulon, écrous, et rondelles utilisant ¾ » fournies.
- Zusammenbauen Sie die Pfosten- und Transformatorunterseite unter Verwendung des die bereitgestellten ¾" Schraubbolzen, Nüsse nd, und Unterlegscheiben.
- Monte a base do pólo e do transformador usando parafuso, porcas, e arruelas do ¾" fornecidas.
- Monti la base del trasformatore e del palo usando bullone, dadi e rondelle del ¾,, fornite.

PV18N ONLY

12

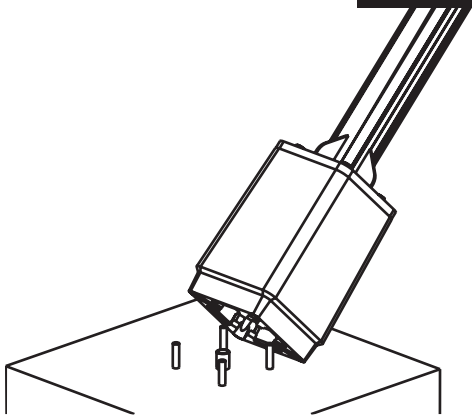


Be sure to align access door on pole with access plate on base.

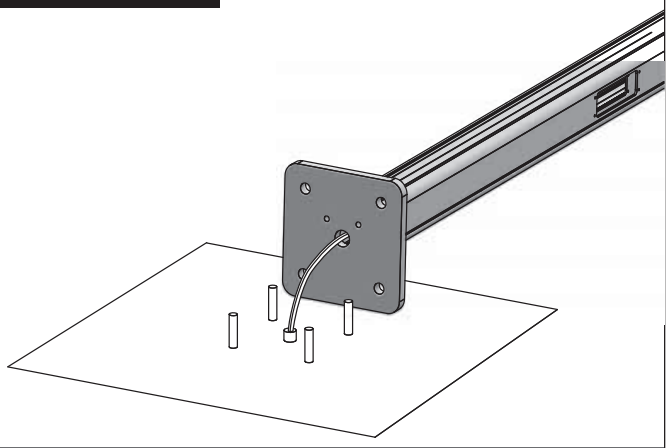
- Esté seguro de alinear la puerta de acceso en poste con la placa del acceso en base.
- Soyez sûr d'aligner la porte d'accès sur le poteau avec le plat d'accès sur la base.
- Seien Sie sicher, Zugang auf Pfosten mit Zugangsplatte auf Unterseite auszurichten.
- Seja certo alinhar a porta de acesso no pólo com a placa do acesso na base.
- Sia sicuro allineare il portello di accesso sul palo con il piatto di accesso sulla base.

13

PV18N



PV16N

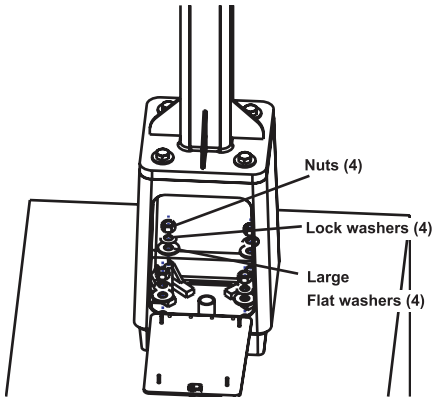


Carefully tilt the transformer base(PV18N ONLY) / POLEVATOR™ assembly into an upright position. Align the bolts on the Anchor Jig with the slots on the transformer base(PV18N ONLY) / POLEVATOR.

- Cuidadosamente inclinan transformador base (montaje)/POLEVATOR™ de PV18N SOLAMENTE en una posición vertical. Alinean perno en ancla plantilla con ranura en transformador base ()/POLEVATOR de PV18N SOLAMENTE.
- Soigneusement inclinent transformateur base) (de PV18N SEULEMENT/POLEVATOR™ dans une position droite. Alignent boulon sur ancre gabarit avec fente sur transformateur base) (de PV18N SEULEMENT/POLEVATOR.
- Sorgfältig kippen Transformator Unterseite (PV18N NUR/POLEVATOR™) in eine aufrechte Position. Übereinstimmen Schraubbolzen auf Anker Spannvorrichtung mit Schlitze auf Transformator Unterseite (PV18N) NUR/POLEVATOR.
- Com cuidado inclinam transformador base (conjunto) de PV18N SOMENTE/POLEVATOR™ em uma posição ereta. Alinham parafuso em escora gabarito com entalhe em transformador base () de PV18N SOMENTE/POLEVATOR.
- Con attenzione inclinano trasformatore base (assemblea)/POLEVATOR™ di PV18N SOLTANTO in una posizione dritta. Allineano bullone su ancoraggio maschera con scanalatura su trasformatore base ()/POLEVATOR di PV18N SOLTANTO.

PV18N ONLY

14



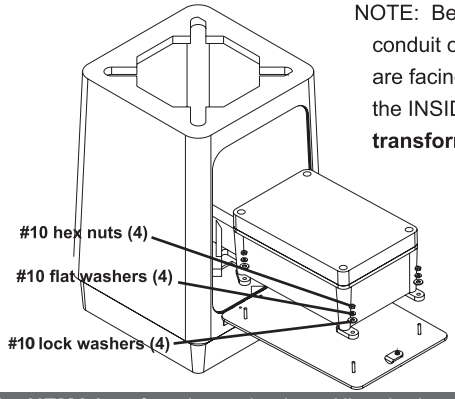
- Ensure that the pole is vertical on all sides. Use a bubble level or plumb bob to check.
- If you're not using leveling nuts, use appropriate shimming methods.

- Asegúrese de que el poste sea vertical en todos los lados. Utilice un nivel de burbuja de aire o una sacudida vertical para comprobar.
- Si you' re no usando la nivelación de tuercas, utilice los métodos que calzan apropiados.
- Assurez-vous que le pôle est vertical de tous les côtés. Employez un niveau à bulle ou un plomb à plomb pour vérifier.
- Si you' ; re pas utilisant niveler des écrous, employez les méthodes de calage appropriées.
- Garantieren Sie, dass der Pfosten auf allen Seiten vertikal ist. Benutzen Sie eine Wasserwaage oder ein Lot, um zu überprüfen.
- Wenn you' Re nicht unter Verwendung des Planierens der Nüsse, wenden Sie passende ausgleichenmethoden an.
- Assegure-se de que o pólo esteja vertical em todos os lados. Use um nível de bolha ou um prumo a prumo para verific.
- Se you' a re utilização nivelando porcas, usa métodos de calço apropriados.
- Accerti che il palo sia verticale da tutti i lati. Usi una livella a bolla o un peso plumb per controllare.
- Se you' re non usando livellando i dadi, usa i metodi mettenti adatti.

PV18N ONLY

15

NOTE: Be sure the conduit openings are facing toward the INSIDE of the **transformer base.**

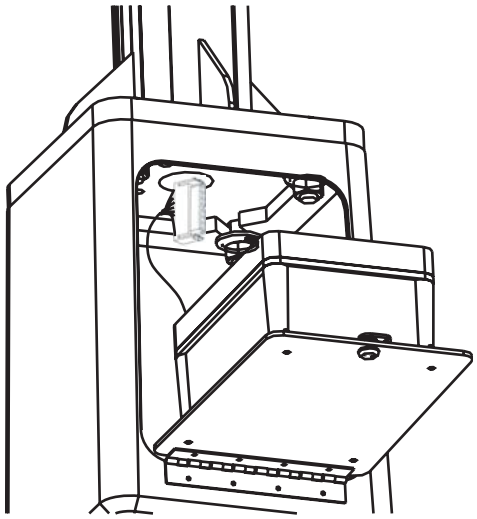


- Remove the **NEMA box** from its packaging. Align the box with the studs on the inside of the **Transformer Base Access Door** and attach using the **#10** lock washers, #10 flat washers, and #10 hex nuts.

- Quite la caja de la nema de su empaquetado. Alinee la caja con los pernos prisioneros en el interior de la puerta y de la fijación de acceso de la base del transformador usando las arandelas planas de las arandelas #10, de cerradura #10, y las tuercas de maleficio #10.
- Enlevez la boîte de NEMA de son empaquetage. Alignez la boîte avec les goujons sur l'intérieur de la porte d'accès et de l'attache de base de transformateur utilisant les rondelles de freinage plates des rondelles #10, #10, et les écrous de sortilège #10.
- Entfernen Sie den NEMA-Kasten von seinem Verpacken. Richten Sie den Kasten mit den Bolzen auf dem Innere des Transformator-Unterseiten-Zugangs und der Befestigungs unter Verwendung der flachen Federringe der Unterlegscheiben #10, #10 und #10 Sechskantmuttern aus.
- Remova a caixa do NEMA do seu empacotamento. Alinhe a caixa com os parafusos prisioneiros no interior da porta de acesso da base do transformador e una-a usando as arruelas lisas das arruelas #10, de fechamento #10, e as porcas de hex #10.
- Rimuova la scatola del NEMA dal relativo imballaggio. Allini la scatola con le viti prigioniere sulla parte interna del portello di accesso della base del trasformatore ed attacchi usando le ranelle di bloccaggio piane delle rondelle #10, #10 e dadi di sfortuna #10.

PV18N ONLY

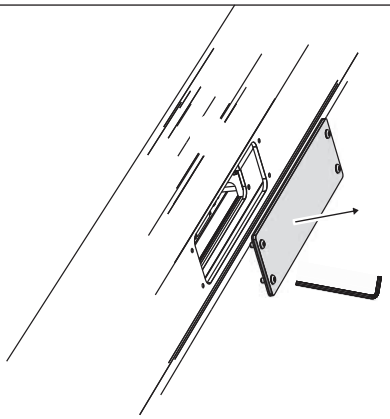
16



- Run the wiring harness from the pole into the NEMA box

- Funcione con el arnés de cableado del poste en la caja de la nema.
- Courez le harnais de câblage du poteau dans la boîte de NEMA.
- Lassen Sie den Verdrahtungskabelstrang vom Pfosten in den NEMA-Kasten laufen.
- Funcione o chicote de fios de fiação do pólo na caixa do NEMA.
- Allontani il cablaggio di collegamenti dal palo nella scatola del NEMA.

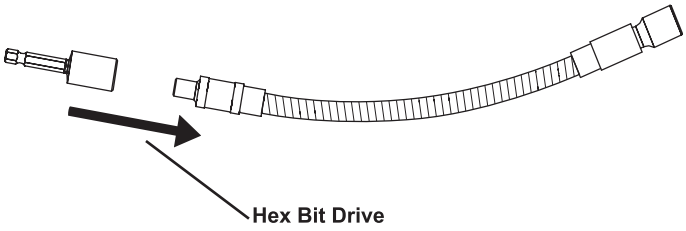
17



Remove the Access Opening Plate with Security Tool provided

- Quite la placa de la abertura del acceso con la herramienta de la seguridad proporcionada
- Enlevez le plat d'ouverture d'accès avec l'outil de sécurité fourni
- Entfernen Sie die Zugangs-Öffnungs-Platte mit dem bereitgestellten Sicherheits-Werkzeug
- Remova a placa da abertura do acesso com a ferramenta da segurança fornecida
- Rimuova il piatto di apertura di accesso con l'attrezzo di sicurezza fornito

18



- The **Flexible Shaft** supplied with the **POLEVATOR™** may come with a separate **Hex Bit Drive** which provides the necessary hex shank for use with an electric drill.

- El eje flexible suministrado el POLEVATOR puede venir con una impulsión separada del pedacito de maleficio que provea de la caña necesaria del maleficio para el uso un taladro eléctrico.
- L'axe flexible fourni avec le POLEVATOR peut venir avec une commande séparée de peu de sortilège qui fournit à la jambe nécessaire de sortilège pour l'usage un foret électrique.
- Die flexible Welle, die mit dem POLEVATOR geliefert wird, kann mit einem unterschiedlichen Sechskanteinsatz-Antrieb kommen, der den notwendigen Hexeschaft für Gebrauch mit einem elektrischen Bohrgerät versieht.
- O eixo flexível fornecido com o POLEVATOR pode vir com uma movimentação separada do bocado de Hex que forneça a pata necessária do hex para o uso uma broca elétrica.
- L'albero flessibile fornito con il POLEVATOR può venire con un azionamento separato della punta di sfortuna che fornisce alla tibia necessaria della sfortuna per uso un trivello elettrico.

19

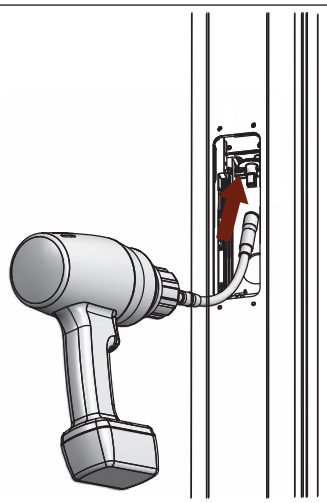
Drill Recommendations

- Corded or cordless drills can be used.
- Use a drill with multiple torque selections. Begin at a low torque to determine which setting will lower and raise the housing. **DO NOT USE A HIGHER TORQUE THAN IS NECESSARY!**

CAUTION:

To reduce the risk of personal injury, exercise caution when carriage is near end of travel (Top or Bottom). Reduce speed to around reactive forces.

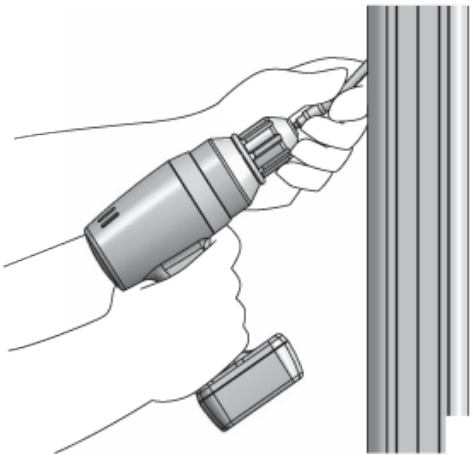
20



- Attach the hex shank end of the **Flexible Shaft** to a drill.
- Attach the square drive end of the **Flexible Shaft** to the **Drive Shaft**.

- Ate el extremo de la caña del maleficio del eje flexible a un taladro.
- Ate el extremo de la impulsión cuadrada del eje flexible al eje impulsor.
- Attachez l'extrémité de jambe de sortilège de l'axe flexible à un foret.
- Attachez l'extrémité d'entraînement carré de l'axe flexible à l'arbre d'entraînement.
- Bringen Sie das Hexeschaftende der flexiblen Welle zu einem Bohrgerät an.
- Bringen Sie das Vierkantmitnehmerende der flexiblen Welle zur Antriebsachse an.
- Una a extremidade da pata do hex do eixo flexível a uma broca.
- Una a extremidade da movimentação quadrada do eixo flexível ao eixo da movimentação.
- Attacchi l'estremità della tibia della sfortuna dell'albero flessibile ad un trivello.
- Attacchi l'estremità dell'azionamento quadrato dell'albero flessibile al pozzo di azionamento.

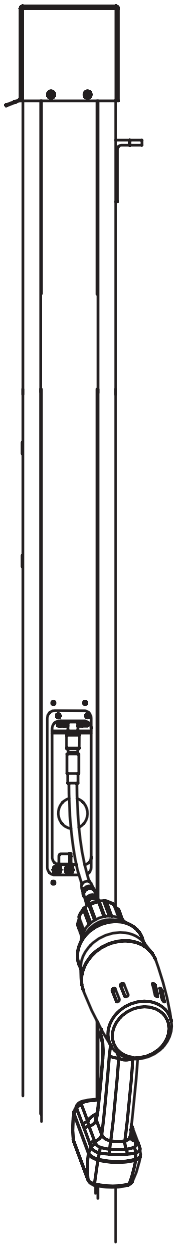
21



Hold the Flexible Shaft's casing to prevent spinning of the casing. A spinning casing could damage wires that come in contact with the Flexible Shaft.

- Sostenga la cubierta del eje flexible para prevenir el giro de la cubierta. Una cubierta de giro podía dañar alambres que entran en contacto con el eje flexible.
- Tenez l'enveloppe d'axe flexible pour empêcher la rotation de l'enveloppe. Une enveloppe de rotation a pu endommager fils qui contactent l'axe flexible.
- Halten Sie das Gehäuse der flexiblen Welle, um das Spinnen des Gehäuses zu verhindern. Ein spinnendes Gehäuse konnte beschädigen Drähte, die mit die flexible Welle in Berührung kommen.
- Prenda a embalagem de eixo flexível para impedir o giro da embalagem. Uma embalagem de giro podia danificar fios que vêm em contacto com o eixo flexível.
- Tenga l'intelaiatura dell'albero flessibile per impedire la filatura dell'intelaiatura. Un'intelaiatura di filatura ha potuto danneggiare legare che contattano l'albero flessibile.

Note : Drill must be in **FORWARD** to lower the **Carriage Plate**.



- Make sure the drill is in the FORWARD position before activating.
- Activate the drill and lower the **Carriage Plate**. DO NOT RUN ON FAST SPEED! Lowering at slow speed will only take two to three minutes.

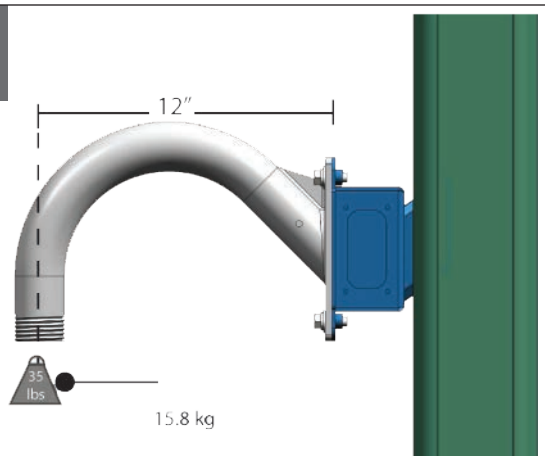
- Cerciórese de que el taladro esté en la posición DELANTERA antes de activar. •Active el taladro y baje la placa de Carraige. ¡NO FUNCIONE EN VELOCIDAD RÁPIDA! Baja en la voluntad despacio solamente para tardar dos a tres minutos.
- Assurez-vous que le foret est en position VERS L'AVANT avant le déclenchement. •Activez le foret et abaissez le plat de Carraige. NE COUREZ PAS SUR LA VITESSE RAPIDE ! Abaissement à la volonté à basse vitesse seulement pour prendre deux à trois minutes.
- Stellen Sie sicher, dass das Bohrgerät in der VORWÄRTSposition ist, bevor es aktiviert. •Aktivieren Sie das Bohrgerät und senken Sie die Carraige Platte. LAUFEN SIE NICHT AUF SCHNELLE GESCHWINDIGKEIT! Am langsamen Willen nur, senken von zwei bis drei Minuten zu nehmen.
- Certifique-se que a broca está na posição PARA DIANTE antes de ativar. •Ative a broca e abaixe a placa de Carraige. NÃO FUNCIONE NA VELOCIDADE RÁPIDA! Abaixar na velocidade lenta tomará somente dois a três minutos.
- Assicuri che il trivello sia nella posizione DI ANDATA prima dell'attivazione. •Attivi il trivello ed abbassi il piatto di Carraige. NON FUNZIONI SULLA VELOCITÀ VELOCE! Abbassandosi alla volontà a bassa velocità soltanto per richiedere due - tre minuti.

23

• Mount the housing Bracket / Dome to pole per manufacturer instructions.

- Monte el soporte/la bóveda de la cubierta al poste por instrucciones del fabricante.
- Montez la parenthèse/dôme de logement au poteau par instructions de fabricant.
- Bringen Sie den Gehäuse Haltewinkel/die Haube zum Pfosten pro Herstelleranweisungen an.
- Monte o suporte/abóbada da carcaça ao pólo por instruções do fabricante.
- Monti la staffa/cupola dell'alloggiamento al palo per istruzioni del fornitore.

24

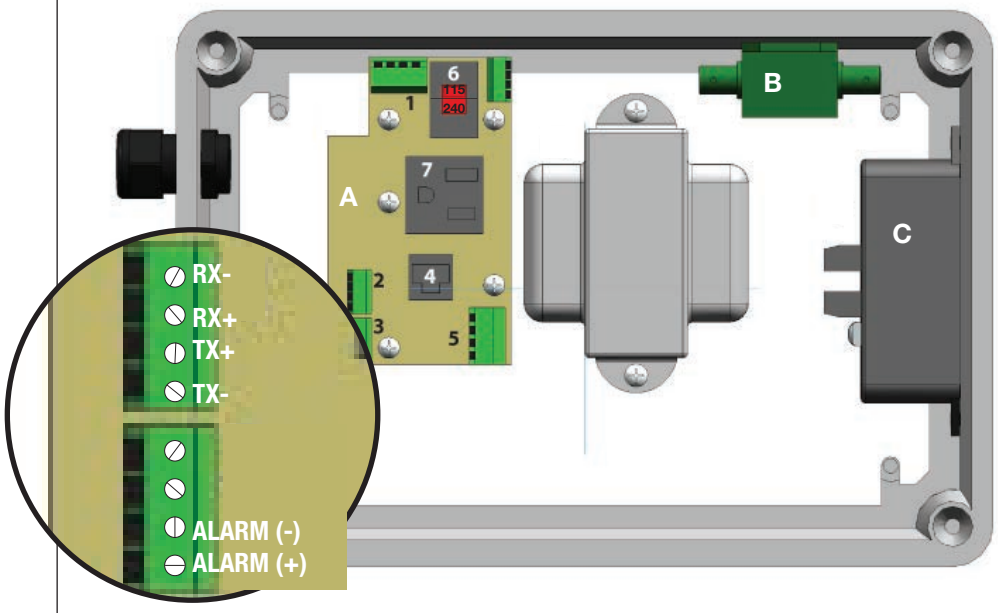


• Do not add more than 35lbs or extend out more than 12". Use 3/8 x 16 screws to the appropriate length for mounting.

- No agregue más que 35lbs ni extienda hacia fuera más de 12". Utilice 3/8 x 16 tornillos a la longitud apropiada para el montaje.
- N'ajoutez pas plus que 35lbs ou ne prolongez pas dehors plus de 12 ». Utilisez 3/8 x 16 vis à la longueur appropriée pour le support.
- Fügen Sie nicht mehr als 35lbs hinzu oder verlängern Sie heraus mehr als 12". Benutzen Sie 3/8 x 16 Schrauben zur passenden Länge für Montage.
- Não adicione mais do que 35lbs nem não os estenda para fora mais de 12". Use 3/8 x 16 parafusos ao comprimento apropriado para a montagem.
- Non aggiunga più di 35lbs o non estenda fuori più di 12,,. Utilizzi 3/8 x 16 di viti alla lunghezza adatta per il montaggio.

PV18N ONLY

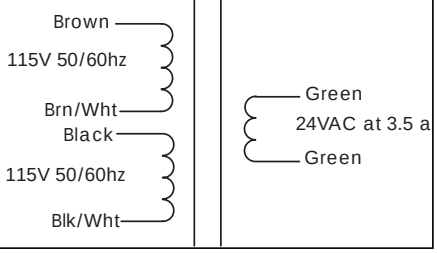
25 NEMA Box Wiring Diagram



	Description
A	Connector Board
B	Video Surge
C	Communication Surge
1	GND, N, L
2	RX-RX+TX+TX-
3	ALR- ALR+
4	For Analog use ONLY
5	GND, N, L
6	115/240

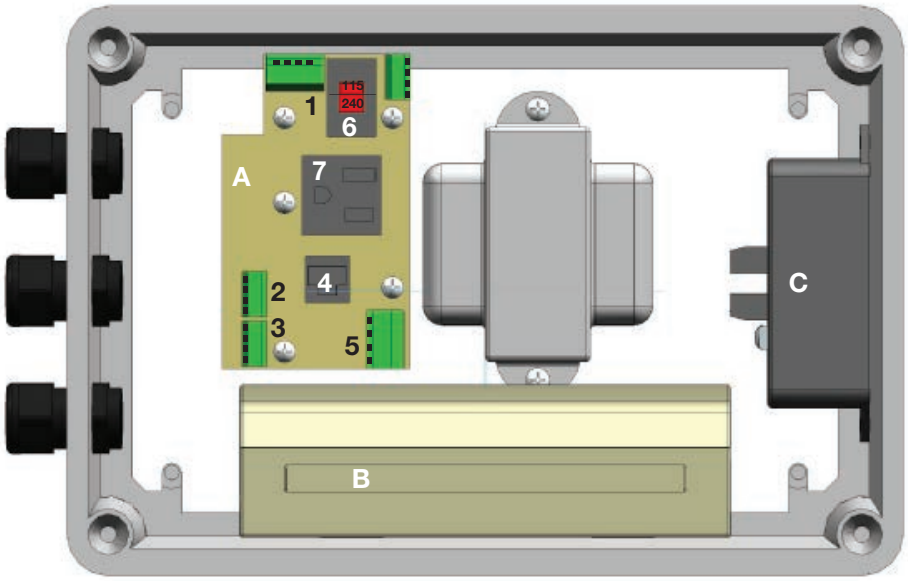
RX+	BLUE
RX-	BLUE/WHITE
TX+	ORANGE
TX-	ORANGE/WHITE
ALARM+	BROWN
ALARM -	BROWN/WHITE

Transformer Wiring



(*) Connect directly to incoming line.
***(Standard wiring from factory set for 110 VAC input. For 220 input contact factory for alternate wiring).**

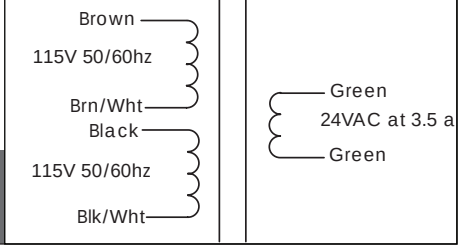
NEMA Box Wiring Diagram



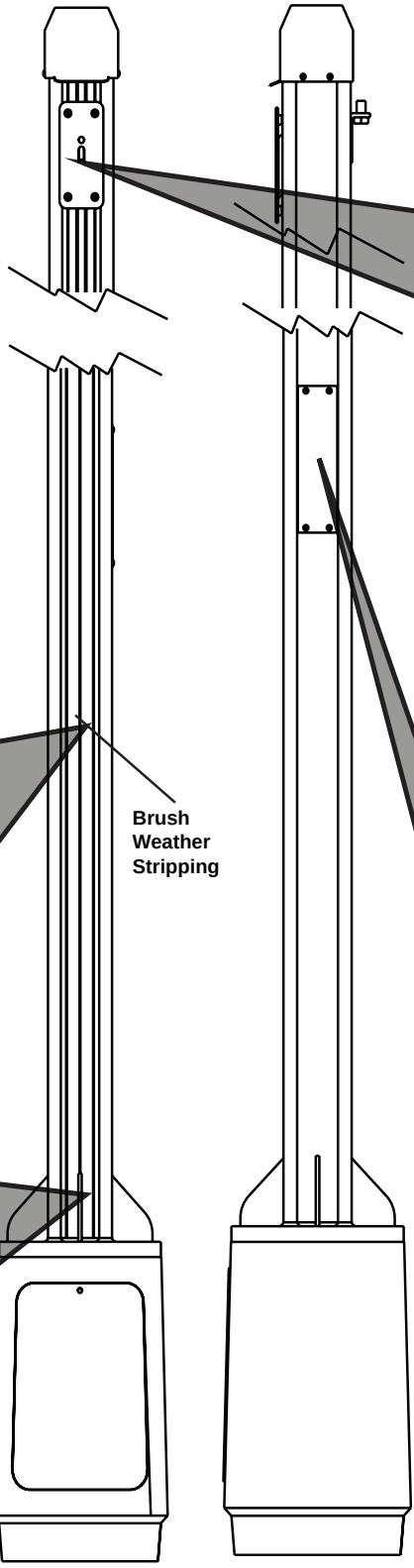
	Description
A	Connector Board
B	Midspan
C	Communication Surge
1	GND, N, L
2	RX-RX+TX+TX-
3	ALR- ALR+
4	For Analog use ONLY
5	GND, N, L
6	115/240

(*) Connect directly to incoming line.
***(Standard wiring from factory set for 110 VAC input. For 220 input contact factory for alternate wiring).**

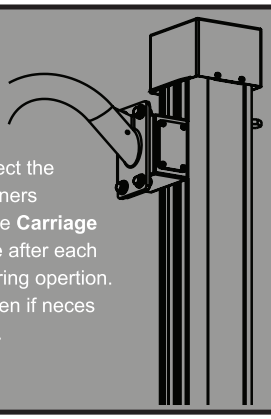
Transformer Wiring

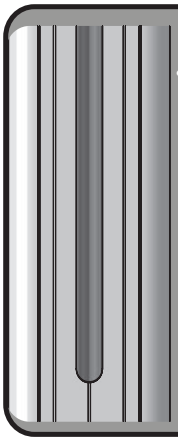


• We recommend regular inspections for the **PolEvator™**. The **PolEvator™** is designed to give years of trouble-free service, but since it will most likely be located in an area accessible to the public, vandalism could create some concerns. Inspect to insure that no one has tampered with the pole, especially in the area of the **Brush Weather Stripping** and the **Access Opening**.



• Inspect the fasteners on the **Carriage Plate** after each lowering opertion. Tighten if neces sary.

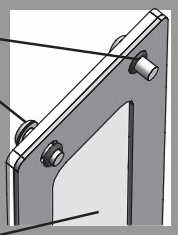




• Periodically inspect the **Brush Weather Stripping** for signs of vandalism or possible wear. Be sure the seal is tight.

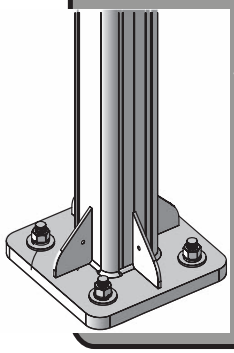
Brush Weather Stripping

Security Screws



O-ring

• The **Security Screws** holding in the **Access Opening Plate** are captive, held in place by **O-rings**. If you should accidentally back one out completely, be sure to place it back in the plate and NOT in the pole. Placing it in the pole could interfere with the movement of the **Connector Block** during raising and lowering operations.



• Periodically inspect the bolts on the **Base Plate** of the pole and tighten if necessary.

• DO NOT LUBRICATE INTERNAL PARTS
A different type of lubricate might result negatively when combined.

• Check for any signs of excessive moisture inside the **Access Opening**. If you notice any, do an inspection of the **Brush Weather Stripping** for wear or possible vandalism. Should you find any problems with it, call your distributor or dealer for assistance.

• Inspect all connections inside the **Access Opening.**